

Remarks/Arguments

Reconsideration of this application is requested.

Claim Status

Claims 3-26 are pending. Claims 6 and 16 are canceled, and claims 3, 14 and 25 are amended. Claims 3-5, 7-15 and 17-26 are now pending.

Claim Rejections – 35 USC 103

Claims 3-26 are rejected under 35 USC 103(a) as obvious over Schumacher (US 6,269,446) in view of Kuwano (US 2002/0059231). In response, independent claims 3 and 14 are amended to emphasize features not shown or suggested by Schumacher or Kuwano: the digital signature affixing means in the authenticating station, and the use of a plurality of environmental sensors.

Claim 3

Schumacher does not disclose or suggest a plurality of different sensors that measure a plurality of different environmental conditions of the surrounding environment, as required by claim 3 as amended.

In the present invention, as shown in FIG. 1, a plurality of sensors S_1 to S_n , measure a plurality of different environmental conditions of the surrounding environment including, for example, the surrounding temperature, humidity, atmospheric pressure, gas concentration, wind velocity, altitude, sound volume, and light intensity (page 3, lines 22-26; page 23, lines 15-19; page 22, lines 1-4). Along with light intensity, additional generated environmental condition information can be added as authenticating information to the digital data from the digital camera 10 (page 23, lines 22-26). These features are claimed in dependent claims 6 and 25.

Schumacher discloses authenticating an image from a digital camera with GPS-derived time and location data. According to Schumacher, events and images from digital cameras are authenticated with GPS-derived data, by deriving a digital signature based on both coded GPS data and the image data, and by storing the digital signature in a header for a file with the image data (col. 1, line 66 to col. 2,

line 3). In reference to dependent claim 25, the Action states that Schumacher discloses a sensor array 11 of CCD sensors, as shown in FIG. 2, which measure light intensity (col. 3, lines 55-58). Thus, Schumacher discloses a *single* type of environmental condition sensor for light intensity.

Schumacher does not disclose or suggest a *plurality of different* sensors that measure and specify a *plurality* of different environmental conditions of the surrounding environment as disclosed by applicant. In order to emphasize this feature, independent claim 3 is amended to include the limitations of claim 6, and claim 6 is canceled. In addition, claim 25 is amended to further highlight this feature. Accordingly, claim 3 and all claims dependent thereon are not obvious over Schumacher in view of Kuwano.

Claim 14

Schumacher does not disclose or suggest a separate authentication station having its own digital signature affixing means and its own position measuring unit for verifying authentication information received from the information authentication apparatus, as required by claim 14 as amended.

At column 5, lines 14-22, Schumacher discloses a memory medium such as ROM 14 or disk in a personal computer (PC), by which the authenticity of image data and event data (time and location data) are verified. The process steps shown in FIG. 5 may be carried out in camera 10 or in another device such as a personal computer that has access to files (such as through transfer of such files from storage section 16) and desires to confirm the authenticity of the files.

However, Schumacher does not disclose or suggest that the PC includes its own digital signature affixing means having its own position measuring unit as in the present invention. As shown in applicant's FIG. 1, information authentication apparatus 100 includes authenticating information adding section 120 having position measuring unit 44, and the separate authenticating station 200 includes digital signature affixing section 220 having position measuring unit 54. The

generated position information from the position measuring unit 44 of section 120 of apparatus 100 is added as authenticating information to the digital data of digital camera 10 (page 23, lines 20-26). Once encrypted, the digital data with the authenticating information is transmitted from apparatus 100 to authentication station 200 via communication units 18, 24 (page 24, lines 3-6). Once received, authentication station 200 verifies the authenticating information of the received digital data by determining if the received position information is within a prescribed range to the position information from its own position measuring unit 54. If the position information is within a prescribed range, such as, for example, within a radius of 300 meters, then a digital signature is affixed to the digital data (page 26, lines 22-27).

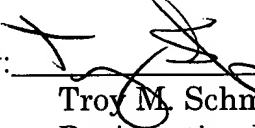
In order to emphasize this feature, independent claim 14 is amended to include the limitations of claim 16, and claim 16 is canceled. Accordingly, claim 14 and all claims dependent thereon are not obvious over Schumacher in view of Kuwano.

Conclusion

This application is now in condition for allowance. The Examiner is invited to telephone the undersigned to resolve any issues that remain after entry of this amendment. Please charge any fees due with this amendment to our Deposit Account No. 50-1314.

Respectfully submitted,
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